



LANDS AND FORESTS

TECHNICAL NOTE



NOVA SCOTIA DEER HARVEST 1988

Art Patton

The 1988 deer hunting season followed the second year of severe winter conditions for deer in Nova Scotia. Spring indices to deer populations were down about 20% from the previous spring and about 30% from the peak of 1986. Because reproductive rates were comparable to those of the previous year, a reduced harvest of deer was predicted for 1988.

Regulation changes that separated the Bear Hunting Season from Deer Hunting Season may have influenced hunter success. However, an increased proportion of report cards from successful hunters' wives may have partially compensated for the loss of extra hunting opportunity afforded by the overlapping bear season.

Hunter report card returns indicated that hunter success was not down as much as popular reports suggested. Reported hunter success for the 1988 deer season was 48.7% among residents, down only 3.1% from that of 1987. Non-resident hunter success was reported as 56.3% compared to 56.9% in 1987.

Resident deer hunting license sales in 1988 were 83,277, down 970 from 1987 sales. Resident Senior Citizen licenses issued were 10,148 compared to 10,700 last year. Total 1988 Resident Licenses sales were 93,425. Reported resident hunter success indicates a resident harvest of 45,498 deer. Non-residents purchased 1,957 licenses and reported 56.3% success for a kill of 1,102 deer, giving a total harvest of 46,600 deer. As expected, this harvest figure is down approximately 7% from the 1987 kill of 50,216.

Many hunters felt that coyote predation was the cause of their difficulty in obtaining a deer kill. Because coyotes prey primarily on the young vulnerable deer, the proportion of fawns in the kill over the past several years

was compared with data obtained through the Deer Management Contributor Program. The 1988 proportion of fawns in the annual harvest was down about 2.6% from the 9 year average. This decrease could be as a result of coyote predation, but could equally have resulted from the hard winter experienced by pregnant does.

This year bowhunters had the opportunity to hunt under an additional permit for 2 weeks prior to the regular season. A total of 1,456 resident and 7 non-resident bowhunting permits were sold. Of the total 1988 deer harvest, 186 were taken by bow and arrow. Although the number of deer taken and the kill per license were both low, most bowhunters would rate their success high in terms of satisfaction.

Table 1 compares the annual hunting data including kill per county for the years 1979-1988. Table 2 shows the 1988 kill by county for resident and non-resident hunters and Table 3 compares the regional kill data for the years 1981-1988.

The 1988 season marks the end of an era in deer harvest calculations. Beginning with the 1989 deer season, hunters will be required by law to present their deer for registration at specified stations across the province. For the past 50 years or so, kill data have been based on a voluntary hunter reporting system. Because we feel that successful hunters are more likely to return their report cards than are unsuccessful hunters, biologists have continually stated that the kill data were primarily representative of harvest trends rather than actual numbers of deer killed.

Henceforth, our official kill figure will be the number of deer registered each year. We expect this figure will be considerably lower than kills determined previously because we will be going from an unknown inflation rate to a known minimum kill figure. Biologists feel that the advantages of this system include: a known minimum number of harvested deer; a weekly kill figure throughout the season which could provide for immediate reaction to an emergency situation; a final harvest total available immediately after the season; potential sites for gathering biological data; and information available for the timely preparation of management recommendations.

Art Patton is Manager, Wildlife Resources (Big Game) for the Department of Lands and Forests, Wildlife Division, Kentville, Nova Scotia.

Table 1. *White-tailed Deer Kill by County, Nova Scotia 1979-1988*

Year License Sale Hunter Success Season Dates	1979 81606 40.6 Oct 15- Nov 15	1980 81801 42.1 Nov 1-30	1981 83939 47.1 Nov 1-30	1982 82750 51.7 Nov 1-30	1983 90141 49.4 Oct 28- Dec 3	1984 95727 54.0 Oct 27- Dec 1	1985 97739** 57.9*** Oct 26- Dec 7	1986 96002** 52.8*** Oct 31- Dec 6	1987 96940 51.8 Oct 30- Dec 5	1988 95382 48.8 Oct 28- Dec 3
Lunenburg	2882	3147	3252	3693	3349	4550	5197	4810	4935	4874
Queens	1443	1803	1867	2045	2050	2687	3012	2608	2518	2336
Shelburne	572*	1017*	1843	1754	1761	2118	2051	1912	1951	1691
Yarmouth	831*	1537*	2502	2417	1995	2328	2233	2828	1984	1725
Digby	1200*	894*	1937	1926	1818	2175	2249	1970	1804	1647
Antapolls	1440	1860	1908	1887	1919	2338	3151	2666	2831	2355
Kings	1003	1196	1140	1405	1462	17889	2184	2144	2235	2239
Hants	2577	2699	2811	3540	3397	3709	3736	4984	4213	3563
Halifax	2908	3116	3165	3492	3631	3908	4979	2840	3204	3755
Cumberland	3510	3294	3924	4064	4360	4714	6240	5679	4255	3755
Colchester	3239	3606	3801	4124	4568	4778	6699	6200	4422	4080
Pictou	2133	2069	2605	2737	2759	3417	5097	3825	3108	2666
Antigonish	956	943	1034	1083	1115	1170	1615	1565	1212	1154
Guyssborough	3229	3363	3497	3646	3507	3727	4858	4037	2691	2160
Inverness	1341	1359	1397	1868	2401	2637	4037	4114	3264	3541
Victoria	643	721	611	693	1076	1294	1977	1738	1108	1340
Cape Breton	1303	1048	1284	1195	1596	1749	2877	2318	1971	2156
Richmond	944	798	980	1218	1388	1940	2068	2376	2216	2401
Unknown	61	-	-	-	361	782	130	406	193	118
Province	32215	34470	39558	42787	44513	51810	66390	57950	50216	46600
% Males	57.9	57.6	61.7	62.5	60.6	58.6	54.6	57.9	56.4	58.1

* Registered kill figures.

** Total number of hunters. These hunters also purchased 16,999 permits to take a second deer for a total of 114,738 legal tags issued.

*** Total number of hunters. These hunters also purchased 14,360 permits to take a second deer for a total of 110,362 legal tags issued.

**** Hunter success is based upon reported proportion of hunters who killed deer.

The county and provincial kill figures are based upon total reported kill under license and second deer permits.

Table 2. Resident and Non-Resident Deer Harvest by County, Nova Scotia, 1988

County	Resident Harvest	Non-Resident Harvest	Total Harvest
Lunenburg	4846	28	4874
Queens	2284	52	2336
Shelburne	1679	12	1691
Yarmouth	1693	32	1725
Digby	1629	18	1647
Annapolis	2307	48	2355
Kings	2207	32	2239
Hants	3535	28	3563
Halifax	2771	28	2799
Cumberland	3626	129	3755
Colchester	3949	131	4080
Pictou	2616	50	2666
Antigonish	1128	26	1154
Guysborough	2120	40	2160
Inverness	3253	288	3541
Victoria	1306	34	1340
Cape Breton	2120	36	2156
Richmond	2325	76	2401
Unknown	104	14	118
PROVINCE	45498	1102	46600

Table 3. Deer Harvest by Region, Nova Scotia, 1981-1988

Region	1981	1982	1983	1984	1985	1986	1987	1988
West	14449	15127	14354	17985	20077	18138	18358	16867
East	20837	22686	23337	25423	35224	28860	23106	20177
Cape Breton	4272	4974	6461	7620	10959	10546	8559	9438
TOTAL	39558	42787	44152	51028	66260	57544	50023	46482